

Our Mission

The San Diego Chapter of the WateReuse Association provides a forum for the exchange of information to promote the beneficial use of recycled water in the San Diego region.

Future of Water on Public Display for San Diego's Water Purification Demonstration Project

In summer 2011, the City of San Diego opened its doors to a facility that is testing whether it can provide a new, local source of water for San Diego. Located in northern San Diego, the Advanced Water Purification (AWP) Facility is a small-scale, state-of-the-art facility that purifies one million gallons of recycled water every day to a level similar to distilled water quality. Since opening, hundreds of people from all over the world have toured the AWP Facility. The tours are open to all community members as part of the project's public education and outreach program. Speakers bureau presentations are also available.



City of San Diego's Advanced Water Purification (AWP) Facility purifies one million gallon of recycled water everyday
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SDS Represented at the Industrial Environmental Association Conference



Patty Krebs, Director of San Diego's Industrial Environmental Association (IEA)

In Fall 2011, the water, wastewater, and water recycling communities lost a good friend with the passing of Patti Krebs. Patti Krebs, who had served as the Director for the San Diego Industrial Environmental

Association (IEA) assisted our industry with her active support and many contributions to enhance water supply reliability in our region. In addition to offering a vendor table to the San Diego Chapter of WateReuse California at the annual IEA conference to promote recycled water use within the industrial sector for two years running, Ms. Krebs had also shown her support by coordinating a joint commercial, industrial, and institutional (CII) Workshop on water issues/recycled water use for IEA members. She had also served as a member of the

statewide CII Task Force. She regularly invited water agencies to present to the IEA and IEA Water Committee on various water-related topics, including recycled water use, and worked in conjunction with water agencies to promote legislation promoting water supply reliability for the San Diego region. She will be missed by all who knew her.

At this past year's IEA conference, Jim Rasmus with Black and Veatch, and at the time Chapter President, gave opening remarks
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Meeting Announcements

NEXT MEETING:

March 15, 2012 9:00am-11:00am
Location: San Dieguito Water District

REMINDER:

WateReuse California Annual Conference
March 25-27, 2012
Sheraton Grand, Sacramento, CA

REMINDER:

16th Annual Water Reuse & Desalination Research Conference
June 4-5, 2012 - San Diego, CA

Future of Water on Public Display (cont'd)

(Continued from page 1)

Registration for tours and presentations can be found on the project's website, www.PureWaterSD.org.

The facility is one component of the City's Water Purification Demonstration Project that is examining the safety and cost of purifying recycled water. If this project is approved to go full-scale, the purified water would blend with imported supplies at San Vicente Reservoir and become part of the City's drinking water supply. Throughout this entire test phase, purified water is not sent to San Vicente Reservoir or the City's drinking water system; instead, it is added to the City's existing recycled water system.

San Diego is examining water purification as a means to develop a locally controlled, supplemental water supply. San Diego's semi-arid region is at the end of pipelines that bring imported water from hundreds of miles away. The City needs to develop local, reliable water sources to lessen its dependence on expensive and limited imported water supplies.

"Our City has been both creative and aggressive in trying to diversify our water supply. The less we rely on importing water from outside San Diego County, the more we control our own destiny," San Diego Mayor Jerry Sanders said. "A locally produced supply of water could be an important option for us."

All wastewater in San Diego undergoes treatment to remove harmful contaminants, making it safe enough to be discharged into the ocean. Some wastewater is diverted to the City's recycled water facilities, where it is further treated and then used for irrigation and industrial purposes. A portion of the recycled water produced at the North City Water Reclamation Plant is sent to the AWP Facility.

To become purified water, the recycled water undergoes a multi-barrier purification process, which includes membrane filtration, reverse osmosis, and advanced oxidation with ultraviolet disinfection and high-strength hydrogen peroxide. The multi-barrier approach of consecutive treatment steps removes or destroys all unwanted materials in the water and produces one of the purest supplies of water available anywhere. The process also includes continuous water quality monitoring. The City thoroughly examines the safety of the water through laboratory tests and computer analysis to ensure that it meets drinking water quality standards.

The results of the project's data collection will determine the safety and cost of a full-scale water purification and reservoir augmentation project. After the test phase is complete, the Mayor and City Council will decide on implementing a full-scale project.

"This Demonstration Project will provide the answers San Diego needs before taking the next step with purified water," said Mayor Sanders. "We owe it to our citizens to see if we can come up with an alternative source of local, safe and relatively inexpensive drinking water."

The same water purification process is already used around the world from Singapore to Belgium to Australia. Just north of San Diego, Orange County operates the world's largest water purification plant. The Orange County Groundwater Replenishment System produces up to 70 million gallons a day of ultra clean water for nearly 600,000 residents and for many businesses and



Marsi Steirer gives a tour of the AWP facility to guests.

attractions, including Disneyland. The purified water is injected into the county's drinking water aquifer. This facility is being expanded to produce an additional 30 million gallons a day.

Visitors are encouraged to tour the City of San Diego's AWP Facility. Guests gain a better understanding of the Demonstration Project and what role the AWP Facility plays in the testing phase. Following an introductory presentation, tour participants walk through the facility to view the water purification technology equipment up close. At the end of the tour, guests view the purified water produced at the facility and have a chance to visually compare it to drinking water and recycled water samples.

Register for a tour at www.purewatersd.org/tours.shtml. A virtual tour of the AWP Facility is also available online at www.purewatersd.org. To request a Demonstration Project presentation for an organization, email purewatersd@sandiego.gov or call (619) 533-6638. For more information visit www.purewatersd.org, email purewatersd@sandiego.gov, or call (619) 533-7572. Article contributed by Danielle Thorsen, City of San Diego

Industrial Environmental Association Conference (cont'd)

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to the conference attendees and briefly discussed the benefits of recycled water use. Toby Roy with the San Diego County Water Authority (Water Authority), and the newly elected San Diego Chapter President, presented on the state's SBx7-7 mandate for industry regarding CII Best Management Practices for water conservation. San Diego Chapter members Alma Rife with the City of San Diego Public Works Department, Alex Rahimian-Pour with RBF Consulting, and Maria Mariscal

with the Water Authority helped staff the vendor table at the two-day conference. The IEA conference was the first event that showcased the joint Water Authority / WateReuse San Diego Chapter's new recycled water tabletop display.

*Article contributed by
Maria Mariscal, San
Diego County Water
Authority*



Maria Mariscal with the San Diego County Water Authority in front of the new WateReuse tabletop display. Special thanks to Joel E. Bowdan with RBF Consulting A Baker Company, San Diego office, for assisting in the overall display design.

WateReuse CA Annual Conference to be

The WateReuse Annual Conference, which will be held at the Sheraton Grand in Sacramento, California from March 25-27, is the premier statewide conference devoted to sustaining water supplies through water recycling and desalination. The conference is designed for individuals, organizations, and agencies that are associated with or interested in the design, management, operation, and use of water recycling and desalination facilities and projects in California. More than 400 leaders from the state's water reuse and desalination industry are expected



to attend. The conference will feature more than 50 technical presentations, poster presentations, a regulatory roundtable session, a statutory rewrite and groundwater recharge

regulations plenary session, an Environmental & Water Resources Institute session, a technical tour, receptions, and awards luncheon, the annual Gordon Cologne Breakfast, the town hall session, and the ever popular exhibition component.

Please visit www.watereuse.org/conferences/California/12 for more information about the conference and to register.

*Article contributed by Mike Wykosky,
GHD*

National Spotlight on Demonstration Project



The City of San Diego's Water Purification Demonstration Project made the cover of the February 10 issue of the New York Times. The cover story "As 'Yuck Factor' Subsidies, Treated Wastewater Flows From Taps" highlights the nationwide interest in water purification as part of the solution for limited water supplies. The

article -- the fourth most-emailed New York Times article on February 10-- features San Diego's Water Purification Demonstration Project along with several full-scale projects already in place.

The full article is available under News and Publications at www.purewatersd.org.

Recycled Water Site Supervisor Certification Training

This half day course is designed to provide recycled water users in the state of California with the necessary information required to become confident in the operational practices of recycled water. The \$60 registration fee includes learning material and a supervisor identification card. Classes are held from 8am—Noon on the following dates:

- Thurs. May 17, 2012
- Thurs. July 19, 2012
- Thurs. October 11, 2012

For more information, please contact
Tom Deeds, 619.668.2090
tdeeds@sandiego.gov

Upcoming WateReuse Events

The San Diego Chapter is asking for volunteers for a few upcoming WateReuse events.

- Wednesday, March 21, 2012 is Professional Society Judging Day at the 57th Annual Greater San Diego Science & Engineering Fair, where the San Diego Chapter of the WateReuse Association will award prizes to the best science projects that advocate water reuse or desalination. We are looking for volunteers to help judge these middle and high school science projects.
- Sunday, April 22, 2012 is San Diego EarthWorks' EarthFair 2012 at Balboa Park. We are looking for volunteers to help staff the WateReuse booth and answer the public's questions about water reuse.

If you can help at any of these events or would like additional information, please contact Mike Wykosky at mike.wykosky@ghd.com or (858) 244-0440. Thank you!

Our Members

Membership forms are available at www.watereuse.org/sections/california/sandiego/membership

AECOM Water	Infrastructure Engineering Corporation
Atkins (formerly PBS&J)	Kennedy/Jenks Consultants
Bailey Environmental Associates, LLC	Katz & Associates
Black & Veatch Corporation	Mellano & Company
Brown & Caldwell	Olivenhain Municipal Water District
Camp Dresser & McKee, Inc.	Otay Water District
Carollo Engineers	Padre Dam Municipal Water District
Carlsbad Municipal Water District	RBF Consulting, A Baker Company
City of Encinitas	Ramona Municipal Water District
City of Escondido	RMC Water & Environment
City of Poway	San Diego County Water Authority
City of San Diego	San Elijo Joint Powers Authority
Coombs-Hopkins	Santa Fe Irrigation District
Dudek	Separation Processes, Inc.
DYK Incorporated	Surfrider Foundation
Fallbrook Public Utility District	TRG & Associates
GHD	Vallecitos Water District
H ₂ O Professor	Water Conservation Technology International
Habitat Restoration Sciences	
Helix Water District	

WateReuse Officers

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Elmer Alex, PE	<i>President-Elect</i>	(858) 244-0440			
Jack Bebee, PE	<i>Treasurer</i>	(760) 728-1125	Mike Wykosky, PE	<i>Director of Public Relations & Membership Outreach</i>	(858) 244-0440
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Jim Rasmus, PE, BCEE	<i>Past President</i>	(858) 566-1936			

Got News? Email articles to mmetts@dudek.com

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